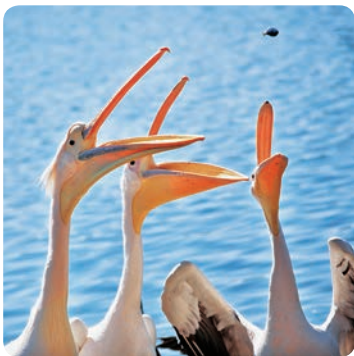


More Key Words

Use these words to talk about “When the Wolves Returned” and “Megafish Man.”

competition

noun



A **competition** is a contest or struggle between two or more people or animals.

nature

noun



Nature means things like rivers, trees, and animals. She likes to study **nature**.

negative

adjective



Something that is **negative** is bad. Screaming at someone is a **negative** action.

positive

adjective



Something that is **positive** is good for you. Exercise is a **positive** activity.

resources

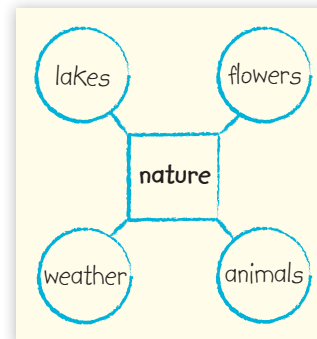
noun



Resources are things that you can use. A library has many **resources**.

Talk Together

Work with a partner. Make a Word Web of examples for each **Key Word**.



Learn to Ask Questions

Do you want to know more about this picture? If so, **ask** yourself **questions**. To figure out the answers, take a closer look at the picture, or think about what you know about **ecosystems**.



◀ This photo shows a tiny ecosystem.

As you read, **ask questions**. You can find the answers to some questions in your head. Think to come up with answers. This will help you understand the text better.

How to Ask Questions



1. Ask a question.

I wonder: _____?



2. Think about your experiences and what you know. Think about what the author is trying to tell you.

I know _____. The author _____.



3. Think about the answer. Read on and ask more questions.

So _____. Now I wonder: _____?

Language Frames

- ? I wonder:
_____?
- ☁ I know _____.
The author
_____.
- ☁ So _____.
Now I wonder:
_____?

Talk Together

Read Rico's report with a partner. Read the sample questions. Then use **Language Frames** to ask and answer questions to check your understanding. Tell a partner about them.

Report

What Makes an Ecosystem?

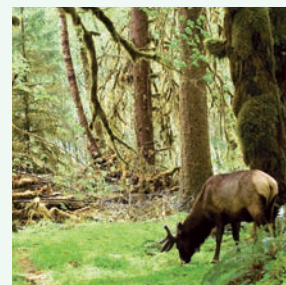
by Rico Borelli

An **ecosystem** is made up of living and nonliving things. Each thing interacts with everything else in the system. An ecosystem needs **resources**. These resources include soil, sunlight, and water. Dead plants and other wastes play a **positive** part, too. They put nutrients into the soil.

Plants take nutrients from the soil. Plant-eaters eat the plants. Predators eat the plant-eaters. This **food chain** keeps the ecosystem in balance. That means there is never too much or too little of any one thing.

Prey and predators eat to stay alive. So there is always **competition** for food in an ecosystem. Sometimes one kind of animal eats too many of another kind. This will have a **negative** effect. It throws the system out of balance.

There are many different ecosystems in **nature**. Some are large, like forests and deserts. Others are as small as a crack in a tree. But every one of them is part of the largest ecosystem of all: planet Earth.



Sample Questions

"I wonder: What are the resources?"

I know that water, sun, and soil are important.

The author probably means those resources.

So I learn that I'm right. Now I wonder: What do dead plants do in an ecosystem?"

◀ = A good place to ask a question

Vowel Sounds and Spellings: oo



foot



book

Listen and Learn

Listen to each sentence. Choose the word that best completes the sentence.

1. We needed some _____ to make a fire.



wedge group wood

2. Please hang your coat on the _____.



hand truck hook

3. I need to read this _____ by Monday.



book born bank

4. The _____ made us a nice dinner.



chute cook core

Talk Together



Listen and read. Find the words with the vowel sound you hear in the word *book* spelled oo.

Over to You

The Hike

Mateo and Juan went on a hike through the sandy, rocky hills.

"I'm too hot," groaned Mateo. "I don't think I can walk much farther."

"Have some water," Juan suggested. "Some hikers have a negative experience because they aren't prepared."

The boys continued walking. "Point to the river on the map," said Mateo.

Juan took out the map and pointed to the river. "There was a drought," said Juan. "The water level is very low."

Suddenly Mateo shouted, "Watch out for that snake!"

The snake slipped into the rocks. "It's good that you saw it," said Juan.

The boys climbed to the top of a hill. The river was below. Mateo raced down the hill.

"Be careful!" yelled Juan, but it was too late. Mateo slipped in the mud and fell over.

Juan stood over him. "Would you say this was a negative hiking experience?"

Mateo shook his head. "Well, at least I'm cool now, so I guess it must be positive!"

Work with a partner.

Choose two words from the story with the vowel sound you hear in *book*. Take turns with your partner making up sentences using the words.

◀ Practice reading words with the vowel sound you hear in *book* by reading "The Hike" with a partner.

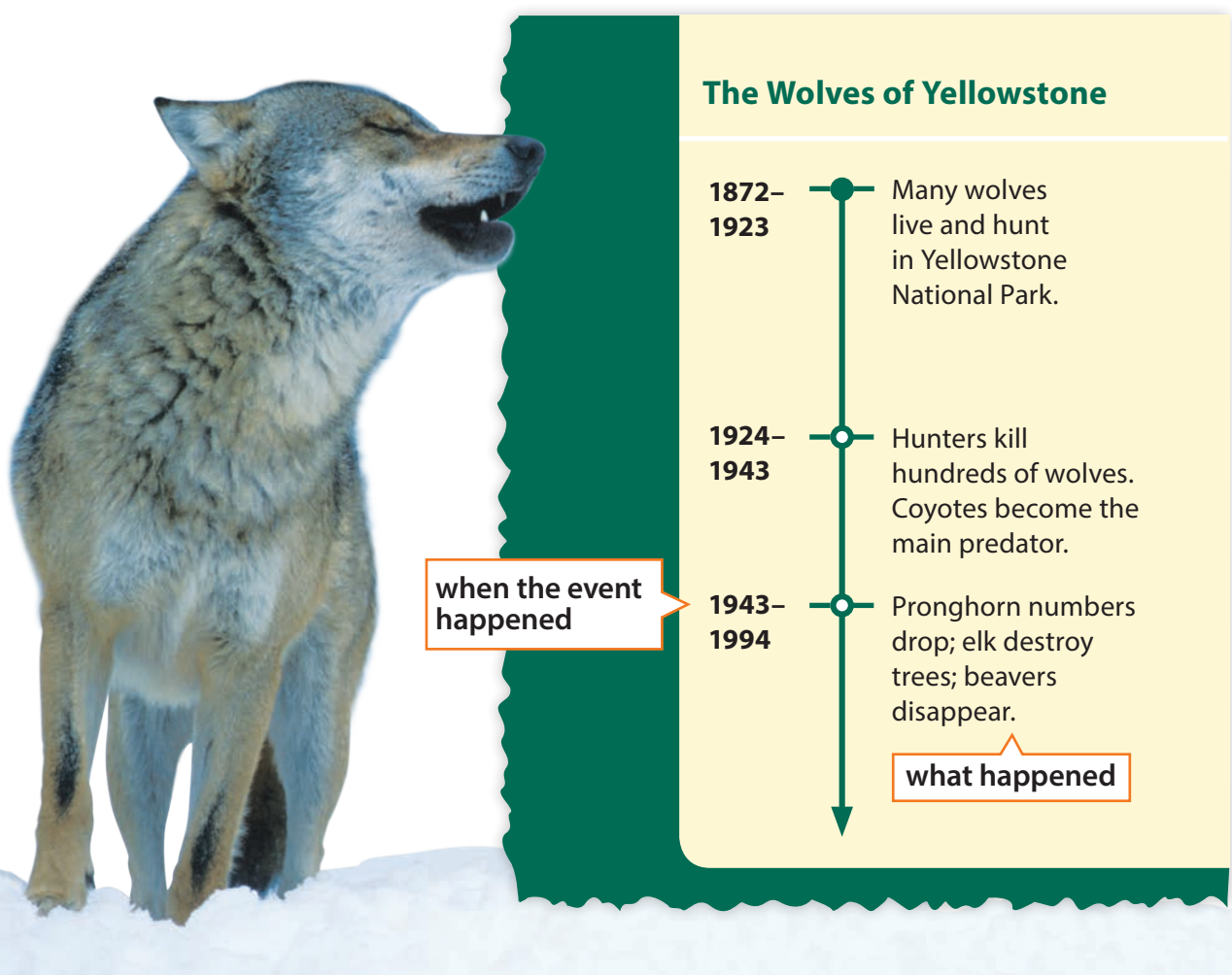
Read a Science Article

Genre

A **science article** is nonfiction. It can explain why certain things happen in nature.

Text Feature

A **time line** shows a sequence of important events. It tells about each event and when it happened.





WHEN THE WOLVES RETURNED

adapted from a book by **DOROTHY HINSHAW PATENT**



► Set a Purpose

Find out why wolves are an important part of an **ecosystem**.

THE FIRST NATIONAL PARK

Where would you go to see some of Earth's natural wonders? You might go to a place called Yellowstone. In Yellowstone, **geysers shoot steam** high into the air and waterfalls flow into colorful canyons. All kinds of wildlife roam the land. This special place became the world's first **national park** in 1872.



Yellowstone National Park is **primarily** in Wyoming, USA.



▲ Steam rises from a geyser.



▲ Yellowstone has many waterfalls.

geysers shoot steam hot water comes up from under the ground
national park protected area of land
primarily mainly

A photograph of two wolves running through a snowy landscape. The wolf in the foreground is running towards the viewer, its mouth open, showing its teeth. The second wolf is slightly behind and to the left. They are running on a snow-covered ground with some evergreen trees in the background.

The Wolves of Yellowstone

1872–
1923

Many wolves live and hunt in Yellowstone National Park.

1924–
1943

Hunters kill hundreds of wolves.

These wolves are hunting.

TROUBLE WITH WOLVES

The purpose for making Yellowstone a national park was to protect its natural wonders for visitors. People enjoyed seeing animals, like elk and deer, in the park too. But wolves **fed on** them. So, hunters were paid to kill the wolves. **Park officials** did not understand that killing the wolves would **throw nature out of balance**.

fed on killed and ate

Park officials People in charge of Yellowstone

throw nature out of balance change the way animals usually live and die

► Before You Continue

1. **Cause/Effect** Why did the United States make Yellowstone a national park?
2. **Explain** Tell why wolves were a problem when Yellowstone first opened. Use your own words.



▲ The wolves disappeared. More and more elk filled the park.

YELLOWSTONE WITHOUT WOLVES

By 1926 the wolves were all gone. Without wolves to hunt them, the number of elk increased. To control the elk population, **rangers** trapped them and sent them to other parks. Rangers also had to shoot and kill the elk to keep their numbers down.



▲ fox

rangers park workers

The Wolves of Yellowstone

1872–
1923

Many wolves live and hunt in Yellowstone National Park.

1924–
1943

Hunters kill hundreds of wolves. Coyotes become the main predator.



▲ coyote

main predator top killer
calves babies

Coyotes also increased in number. Without wolves at the top of the **food chain**, they became Yellowstone's **main predator**. Coyotes eat everything from elk **calves** to insects. But mostly they eat small animals like ground squirrels. So coyotes made it harder for other small predators, like foxes, to find food.

► Before You Continue

1. **Cause/Effect** The wolves disappeared. What were the effects of that event on the **food chain**?
2. **Ask Questions** What questions might visitors have asked the park rangers in 1926?

PRONGHORNS IN DANGER

Coyotes in Yellowstone also fed on newborn **pronghorns**. They became experts at finding pronghorn **fawns**. With so many coyotes in the park, pronghorn numbers dropped. Every year, fewer pronghorn fawns survived. Park managers worried that pronghorns might disappear completely.



▲ pronghorn fawns

pronghorns animals that look like deer
fawns babies

NEW PLANTS DON'T GROW

Even the trees and shrubs **suffered** because the wolves were gone. The elk ate **young shoots** and bark. Young trees and shrubs could not grow fast enough to replace the old ones that died. Soon, the birds that **nested** in the trees and bushes became **rare**.



suffered experienced **negative** effects
young shoots new plants
nested made their homes
rare fewer in number

The Wolves of Yellowstone



◀ An elk eats young shoots.

► Before You Continue

1. **Ask Questions** Ask a question about the pronghorns or elk in Yellowstone. Tell a partner how you plan to find the answer.
2. **Sequence** What happened that led to some birds becoming rare in Yellowstone? Tell the events in order. Use your own words.

A close-up photograph of a beaver with wet, brown fur, gnawing on a piece of wood. The background shows water and some green plants.

A beaver builds a dam.

BEAVERS DISAPPEAR

Beavers use their teeth to cut down trees. They **store** the trees to eat during the winter. They also use the trees to build **dams**. Beaver dams create ponds that provide homes for ducks and other animals.

Without trees, the beavers could not survive. They were almost gone from part of the park by the 1950s.

store save

dams walls that hold back water

A SOLUTION

Many of the problems in the park began soon after the wolves were **eliminated**. Scientists predicted that bringing wolves back would help. Wolves could control the numbers of coyotes and elk. This would **allow** plants and other animals to live and grow.



squirrel ►

eliminated killed

allow make it possible for

The Wolves of Yellowstone

1872–
1923

Many wolves live and hunt in Yellowstone National Park.

1924–
1943

Hunters kill hundreds of wolves. Coyotes become the main predator.

1943–
1994

Pronghorn numbers drop; elk destroy trees; beavers disappear.

► Before You Continue

1. **Cause/Effect** When the beavers left, other animals in Yellowstone lost their homes. Why?
2. **Summarize** What have you learned so far about wolves? How do they affect the balance of **nature** in Yellowstone?

THE WOLVES RETURN

Wolves from Canada were brought to Yellowstone in 1995 and 1996. Seven groups of wolves were set free in the park. Each **pack** lived in a wide area called a territory. It didn't take long for the wolves to **feel at home**. There were a lot of animals, especially elk, for them to hunt.

Year by year, the number of wolves in Yellowstone grew. When a pack became too big, it broke into smaller packs. These groups slowly filled the park. Now, about twelve wolf packs live in Yellowstone. There are usually around 150 wolves in the park.



▲ young wolves



pack group of wolves
feel at home enjoy living in Yellowstone

The Wolves of Yellowstone

1872–
1923

Many wolves live and hunt in Yellowstone National Park.

1924–
1943

Hunters kill hundreds of wolves. Coyotes become the main predator.

1943–
1994

Pronghorn numbers drop; elk destroy trees; beavers disappear.

1995–
1996

Wolves return to Yellowstone.



► Before You Continue

1. **Use Text Features/Make Inferences** What probably helped the wolf packs from Canada grow in Yellowstone?
2. **Evaluate** Was it a good idea to return wolves to Yellowstone? Use facts from the text to support your answer.

NATURE'S BALANCE RETURNS

Wolves saw the coyotes as **competition**. They killed coyotes or chased them out of their territories. Now, with fewer coyotes hunting them, pronghorn and other animals survive more easily. Foxes, owls, and other animals also **benefit**. There are fewer coyotes to **compete** with them for the same food.

Without wolves, elk **lingered along the streams** in the park. They ate young trees before they had a chance to grow. Now the elk must keep moving. This makes it harder for wolves to find them. Because the elk are moving, trees can grow again.



▲ Elk keep moving. They want to stay away from wolves.



benefit do better

compete fight

lingered along the streams stayed
near the small **rivers**



The Wolves of Yellowstone

1872–
1923

Many wolves live and hunt in Yellowstone National Park.

1924–
1943

Hunters kill hundreds of wolves. Coyotes become the main predator.

1943–
1994

Pronghorn numbers drop; elk destroy trees; beavers disappear.

1995–
1996

Wolves return to Yellowstone.



► Before You Continue

1. **Cause/Effect** How do wolves help pronghorn survive?
2. **Details** What do elk do to stay safe from wolves?



▲ beaver



▲ owl

BEAVERS COME BACK

The animals that need the trees are also coming back. For example, in 1996 only one **beaver colony** lived in the northern part of the park. By 2003, there were nine. Scientists hope that birds that hunt from trees, like owls, will also **become more common**.

beaver colony group of beavers
become more common increase in number

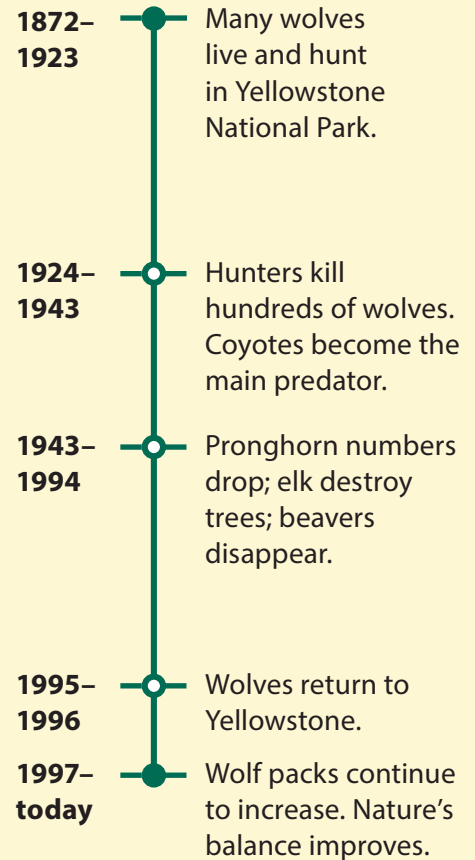
The Wolves of Yellowstone

A BALANCED ECOSYSTEM

Returning the wolf is helping to make Yellowstone **whole again**.

Scientists hope that as the years go by, even more plants and animals will come back.

Today, Yellowstone is becoming a healthy system again, thanks to the wolves' return. ❖

- 
- 1872–1923** Many wolves live and hunt in Yellowstone National Park.
 - 1924–1943** Hunters kill hundreds of wolves. Coyotes become the main predator.
 - 1943–1994** Pronghorn numbers drop; elk destroy trees; beavers disappear.
 - 1995–1996** Wolves return to Yellowstone.
 - 1997–today** Wolf packs continue to increase. Nature's balance improves.

whole again a balanced **ecosystem**

► Before You Continue

- 1. Details** Name two animals that need the trees in Yellowstone.
- 2. Author's Purpose** What is this article about? Why did the author write it?

Key Words

competition

drought

ecosystem

food chain

level

nature

negative

positive

resources

river

Talk About It

1. What did you learn about animals in this **science article**? Give two facts.

I learned _____. I also learned _____.

2. Imagine you work at Yellowstone Park. What might a visitor ask you about the history of wolves in the park?
Ask and answer the question.

Why were wolves _____? Wolves were _____ because _____!

3. Wolves, coyotes, and elk are part of the **food chain** in Yellowstone. Explain how this part of the chain works.
What does each animal eat?

Wolves eat _____, and coyotes eat _____. Elk eat _____.

Write About It

In folk tales and other stories, wolves are often **negative** characters. Why do you think this is so? Do you think it is fair? Write two or three sentences to explain your thoughts. Use **Key Words**.



Wolves are often negative characters because _____.

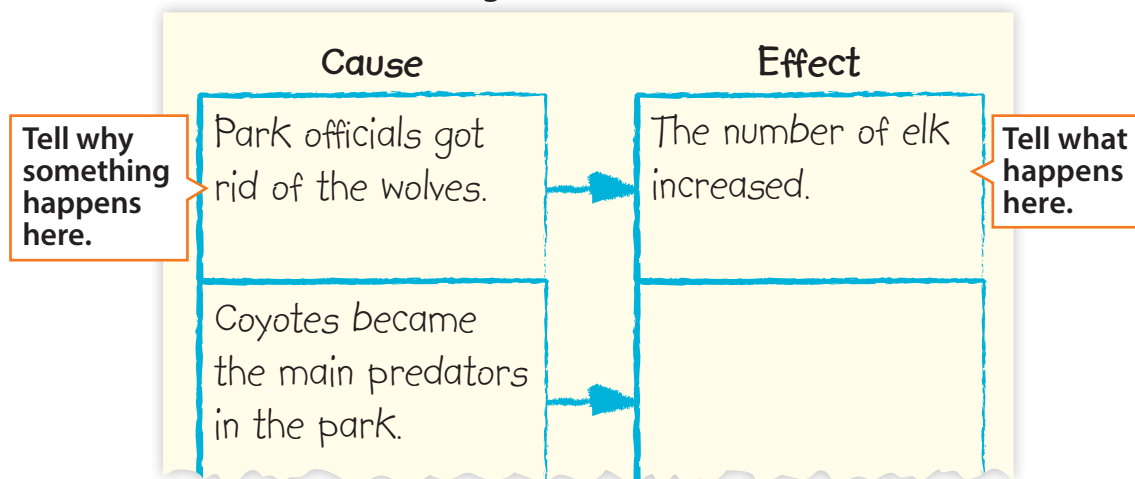
I think/do not think this is fair because _____.

Reread and Retell

Cause and Effect

Complete a cause-and-effect diagram for "When the Wolves Returned."

Cause-and-Effect Diagram



Now use your diagram to retell the information in the article to a partner. Tell each cause. Then use the sentence frame to tell the effect. Use as many **Key Words** as you can. Record your retelling.

This happened,
so _____.

Fluency

Practice phrasing as you read. Rate your reading.

Talk Together

How did **nature** lose its balance in Yellowstone? Summarize the events for a partner. Use **Key Words**.